

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0066613; AI 4301; PER20060001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.           **THE APPLICANT IS:** Village of South Mansfield  
South Mansfield Wastewater Treatment Facility  
P.O. Box 995  
Mansfield, LA 71052
- II.           **PREPARED BY:** Ronda Burtch
- DATE PREPARED:** October 23, 2006
- III.          **PERMIT ACTION:** reissue LPDES permit LA0066613, AI 4301; PER20060001
- LPDES application received: March 1, 2006
- LPDES permit issued: September 1, 2001  
  LPDES permit expired: August 31, 2006

### IV.           **FACILITY INFORMATION:**

- A.       The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Village of South Mansfield.
- B.       The permit application does not indicate the receipt of industrial wastewater.
- C.       The facility is located on Albert Lewis Way, near Calvalier Drive in Mansfield, De Soto Parish.
- D.       The treatment facility consists of a three-cell oxidation pond. The third cell is covered with a hydraulic baffle system which is followed by a polishing unit. Disinfection is by chlorination.
- E.       Outfall 001

Discharge Location:     Latitude 32° 0' 15" North  
                                  Longitude 93° 43' 50" West

Description:            treated sanitary wastewater

Design Capacity:        0.125

Type of Flow Measurement which the facility is currently using:

V-Notch Weir with Continuous Recorder

### V.           **RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into Clement Creek, thence into the Toledo Bend Reservoir in segment 110101 of the Sabine River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 110101 of the Sabine River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 110101	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	Full **	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 110101 of the Sabine River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

\*\*The drinking water use applies only to the Toledo Bend Reservoir–Texas–Louisiana Line to Toledo Bend Dam. Surface waters designated as drinking water supplies are identified in the numerical criteria tables; this designation does not apply to their tributaries or distributaries unless so specified (33:IX.1111.D).

#### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 110101 of the Sabine River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

#### VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

#### VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX.**

**PROPOSED PERMIT LIMITS:**

Subsegment 110101, Toledo Bend Reservoir - Texas-Louisiana line to Toledo Bend Dam, is listed on LDEQ's Final 2004 303(d) List as impaired for mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Sabine River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

The mercury impairment listed for subsegment 110101 applies only to those waterbodies specifically identified in LDEQ's Final 2004 Integrated Report and not to the entire subsegment unless so specified. Because the discharge from this facility is not directly into the Toledo Bend Reservoir, mercury will not be addressed in permit development.

**Final Effluent Limits:**

**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg	Weekly Avg	Basis
BOD <sub>5</sub>	10	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	16	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTWs must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X.**

**PREVIOUS PERMITS:**

**LPDES Permit No. LA0066613:** Issued: September 1, 2001

Expired: August 31, 2006

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

**XI.**

**ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning October 16, 2004 and ending October 16, 2006 for this facility.

Date: September 29, 2005

Inspector: LDEQ

Findings and/or Violations:

1. The WWTP is a multi-celled oxidation pond with a polishing unit and chlorine contact chamber. The WWTP was operating satisfactory.
2. The WWTP's flow meter was not operating properly. Earnest Wilbert, Operator, said a contractor was scheduled to repair the flow meter within a week.
3. DMR's are submitted according to permit requirements.
4. Effluent samples are collected according to permit requirements.
5. A contract lab collects effluent samples and completes all required analysis.
6. Earnest Wilbert was present during the inspection and exit interview.

Date: August 28, 2006

Inspector: LDEQ

Findings and/or Violations:

1. The WWTP is a multi-celled oxidation pond with a polishing unit and chlorine contact chamber.
2. The following operation & maintenance deficiencies were noted: (a) polishing unit was inoperable (b) effluent flow meter was inoperable (c) floating solids needed to be removed from the polishing unit. The WWTP is currently meeting effluent permit limits. Mr. Earnest said the inoperable units have been scheduled for repairs.
3. DMR's were reviewed from September 2005 to July 2006. DMR's revealed satisfactory effluent results.
4. A contract lab completes effluent analysis.
5. Earnest Wilbert was present during the inspection and exit interview.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that there are no recent enforcement actions administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning September 1, 2004 through August 31, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
November 2004	BOD <sub>5</sub> , Monthly Loading TSS, Monthly Loading Fecal Coliform, Monthly Avg. Fecal Coliform, Weekly Avg.	10.3 lbs/day 18.4 lbs/day 653 col/100 ml 833 col/100 ml	10 lbs/day 16 lbs/day 200 col/100 ml 400 col/100 ml
January 2006	Fecal Coliform, Weekly Avg. Fecal Coliform, Monthly Avg.	>211.7 col/100 ml TNTC	200 col/100 ml 400 col/100 ml
May 2006	BOD <sub>5</sub> , Monthly Avg. BOD <sub>5</sub> , Weekly Avg.	10.8 mg/l 15.7 mg/l	10 mg/l 15 mg/l

**XII. ADDITIONAL INFORMATION:**

Please be aware that the Department will be conducting a TMDL in the Sabine River Basin scheduled for completion in 2007. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.125 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.125 \text{ MGD} \times 10 \text{ mg/l} = 10 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent Characteristics

Monitoring Requirements

	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII**

**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV**

**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Village of South Mansfield, Village of South Mansfield Wastewater Treatment Fa, March 1, 2006.